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**PETROLEUM BASED DEVELOPMENT
AND THE PRIVATE SECTOR:
A CRITIQUE OF THE SAUDI ARABIAN
INDUSTRIALIZATION STRATEGY**

By Robert E. Looney

In almost every country, industry is the glamor sector of economic development. People look to industrial development to provide much needed employment, to generate higher individual and national incomes, to relieve balance of payments constraints through import substitution, to open up markets for primary products such as those from the mining and fishing sectors, to give the country greater economic independence, to generate new tax revenues, and to furnish an important source of national pride.(1) By and large, these hopes for benefits of industrialization are desirable and realistic — provided a country makes sensible choices.

The problem facing Saudi Arabia is well known. The kingdom has to invest its current oil revenues to develop a viable economic structure for the day when its oil will have been depleted. Industrialization is one apparently attractive strategy open to the government — but this is an option which needs careful analysis.

First, industrialization does not inevitably lead to sustainable, long term growth. Based on the Iranian case, this appears to be particularly true if the process is largely initiated by expatriate companies and individuals with no permanent commitment to the welfare of the country. Industry is of no use if it forms a symbolically modern sector of the economy without developing ever-expanding linkages with the indigenous economy and culture.

Second, development economists often praise industrialization for its employment-generating effects. Yet, this should not be a high priority for the country given its small population. In the long run, non-oil related jobs will obviously be needed. In the short run, though, there may be no point in creating jobs which can only be filled by foreigners.(2)

Given such doubts, is it possible to identify an industrial strategy which is particularly suited to the special circumstances of the country? And how does the existing industrial

strategy measure up to this ideal?

Industrial Strategy

Industrialization in the kingdom is carried out by both the public and private sectors. Because the country adheres to the concept of a free economy, the government has intervened in the industrial development of the country only when it felt it was essential for the welfare of the people. The government has been continuously encouraging the private sector to undertake industrial and other investments as a means of diversifying the economy. When the size of the investment has been large and beyond the capacity of private individuals, however, the government itself has undertaken the capital investment. A number of organizations have been established by the government to develop the basic industries of the kingdom. (3)

The Saudi Arabian government's approach to industrialization seems to have been guided by five major objectives: (4)

1. to assure the availability of essential consumer goods, free of disruptions caused by international events;
2. to lay the basis for a greatly broadened pattern of industrialization by starting the domestic production of iron and steel;
3. to assure the availability of construction materials;
4. to demonstrate to private investors the feasibility of certain industrial and mining projects by making initial investments in industries not previously carried on in the country; and
5. to assist private investment by giving suggestions, technical assistance and credit or credit guarantees.

The primary objective for industrialization is certainly the eventual establishment of an industrial production base which will reduce the country's heavy dependence on oil as its main source of income.

Diversification is aimed at developing those industries that will maintain their economic viability over the long term and includes the development of hydrocarbon based industries and industries contributing to national security and social prosperity. To attain this goal, the government wishes on the one hand to establish in collaboration with foreign and domestic enterprise a complex of export-oriented heavy industries based on hydrocarbons and minerals with a view to exploiting the coun-

other hand, to providing incentives and external economies to the private sector to establish a number of industries supplying the basic consumer and development needs of the economy, thus reducing the country's dependence on imports. (5)

These basic considerations underly most of the government's specific industrial objectives which include: (6)

1. increasing the economy's capacity to produce at competitive costs as wide a range of products as possible for domestic as well as for export markets;
2. the industrial exploitation of the substantial comparative advantages arising from low cost energy, raw materials from hydrocarbon related industry, minerals, agricultural and fishery resources;
3. widening and deepening the kingdom's access to modern technology;
4. achieving fuller capacity utilization in the private manufacturing sector;
5. developing a regionally balanced industrial sector;
6. increasing productivity through closer approach to optimal size of plants;
7. reducing dependency on expatriate workers by national skill creation, through the development of general and technical education, and on-the-job training of national workers; and
8. promoting interlinkage among industries.

The main principles of the government's industrial policy include: (7)

1. The encouragement of manufacturing industries, including agricultural industries which can effectively contribute to the increase of national income, to raising the standard of living and of employment, and to diversification of the economy. For diversifying the economy, the government will work towards the adoption of plans which, besides increasing the national income, will reduce the effect of outside economic disturbances and diversify the opportunities open to Saudi workers.

2. The principle that the economy of the kingdom is based on competition between private commercial and industrial enterprises. In practice this implies that the government realizes that the objectives of industrial development may be more effectively attained if the

Table 1

Industrial Licenses Implemented During 1974-77

| Activity | No. of Licenses | Capital ¹ Paid-Up | Authorized | Employment |
|---|-----------------|------------------------------|------------|------------|
| Food and Beverages | 111 | 524.1 | 1,793.3 | 5,213 |
| Textile, Clothing and Leather Products | 11 | 46.7 | 132.8 | 1,144 |
| Wood Products | 16 | 73.8 | 160.7 | 1,365 |
| Paper Products & Printing | 23 | 73.0 | 185.5 | 1,303 |
| Chemical Products including Petrochemicals, Rubber & Plastics | 78 | 316.5 | 738.3 | 2,318 |
| Construction Materials, China Ceramics & Glassware | 262 | 2,509.3 | 5,685.1 | 16,634 |
| Metal Products | 147 | 515.9 | 1,354.6 | 7,502 |
| Other Products | 2 | 12.4 | 17.8 | 102 |
| TOTAL | 650 | 4,071.7 | 10,068.1 | 35,581 |
| National | (467) | (3,009.7) | (7,201.1) | (22,859) |
| Joint-venture | (183) | (1,062.0) | (2,867.0) | (12,722) |

¹Capital in millions of Riyals

ity for implementing industrial projects.

3. The assurance that businessmen who are prepared to take the risks of success and failure motivated by prospects of profits will enjoy the full support of the government during all stages of the preparation, establishment, and operation of industrial projects beneficial to the kingdom.

4. The philosophy that competition serving the interests of local consumers is the best means of influencing the business community in the industrial field.

5. The belief that the imposition of quantitative restrictions or of control on prices as a means for implementing the industrial policy will be avoided if at all possible; i.e., the government does not intend to impose restrictions except in cases in which competition cannot have an effective role (as in the case of commodities which by their nature are characterized by monopoly).

6. The right of the business community in the industrial field to select, utilize and manage the economy resources, including industrial workers, insofar as this does not conflict with statutes in force.

7. The attraction of foreign capital as well as foreign expertise and their participation in the industrial development projects in cooperation with Saudi businessmen.

8. Assurances to foreign capital that there will be no restrictions on the entry and exit of money to and from the kingdom, and that the government shall continue its policy based on the respect for private ownership required Islamic law.

9. The provision that in addition the government will attempt to promote the growth of all economic sectors suitable local resources available to producers in sufficient quantities and to ensure increasing purchasing power of consumers within the framework of an ever growing national economy.

Early Attempts at Industrialization

In view of the country's almost total lack of modern infrastructure in the early 1950s the government's first programs were devoted, in the main, to updating and expanding existing facilities, with little emphasis on new industrial investments. This period saw the rapid expansion of new road and rail net-

industrial use, and the laying of the foundations for a modern communications system.(8)

In 1954 Saudi Arabia made an unsuccessful effort to incorporate the oil industry into its economy through an agreement with Aristotle Onassis whereby all Saudi Arabian oil that was not transported by tankers directly owned by the concession companies would be transported by a joint government-Onassis tanker line. The concession companies protested this action since most of their oil was transported by chartered ships. Eventually in 1958, this shipping agreement was declared to be a violation of the 1933 concession agreement by a three member arbitration board.(9)

Based on this experience, the government felt that little progress could be made in utilizing the existing oil sector as an instrument through which it could diversify the economy. As an alternative the government established its own national oil company, Petromin, in 1962 to try to attain these goals on its own.

Petromin

The General Petroleum and Minerals Organization — Petromin — was established by the government largely to develop industries based on petroleum, natural gas, and minerals. Besides prospecting, exploration and drilling, Petromin has undertaken a number of activities in the field of oil, such as oil production, refining, transportation, distribution and marketing. Petromin has initiated a number of studies to establish various hydrocarbon based industries, and since its inception has been active in many sectors of the economy.

In general Petromin has been active in three main areas:

1. development of local industry through exploration, production, purchase, sale, transportation, distribution, and marketing of petroleum and minerals;
2. ventures with other companies and/or participation in their capital so as to enter in all areas of industry as stated in 1); and
3. additional power to import any oil products or minerals as needed by Saudi Arabia.

During most of the 1960s and into the 1970s, there was a surplus of oil in the world market. Lacking foreign markets or a substantial crude supply, the company concentrated on the

Development by the Early 1970s

Despite these initial efforts, little progress had been made towards building up an industrial base by the late 1960s. This is evidenced by the results of several surveys beginning with the 1962 Industrial Census.(11) Unfortunately, these early surveys and census are not strictly comparable because of differences in comprehensiveness. Nevertheless, a fairly consistent picture emerges.

By the early 1970s, industry was still dominated by firms in services, trade and commerce. In general, industry was characterized by: 1) the small number of employees per establishment; 2) the lead construction had in large establishments, and 3) the high percentage of manufacturing establishments employing only 1 to 4 persons (about 90 percent).

Of particular significance was the apparent relative increase between 1967 and 1971 in the number of establishments employing 1 to 4 persons, and the drop in the number of establishments employing 100 and over.

While the industrial surveys for these years may have been incomplete in their coverage, there was in any case no clear evidence that larger establishments were becoming more predominant. In fact, the average number of workers per establishment actually dropped from 3.09 for 1967 to 2.4 for 1971. (However this drop is probably the result of the much wider coverage of cities and establishments in the 1971 census which undoubtedly resulted in increasing the number of establishments with small employment included in the survey.)

Several other features are of interest. First, the average capital output ratio (based on the 1969 census) was about 1:1. Second, wages represented one-fifth of the total production, while raw materials represented 36 percent. Third, food and beverages, and cement and non-ferrous metal products accounted for over half the total product. Together with transport equipment and wood and furniture, these branches employed 73 percent of the country's industrial workers. However, cement and non-ferrous metal products had by far the largest size per average establishment in terms of capital invested, value of raw materials, wages, value-added, and total product. Only in terms of workers per establishment does cement and non-ferrous metal products fall behind the three other branches.

sistent picture of a very primitive industrial structure. In addition, several commentators on the period have noted that industry was still beset by a number of difficulties including: 1) a shortage of national industrial entrepreneurship as well as managerial, technical, supervisory, and skilled manpower, and 2) certain cultural influences pertaining to attitudes toward work, work intensity, incentives, and the like, which tended to depress productivity, especially at the lower skill levels.

In 1970 a survey of 294 manufacturing establishments from the largest, such as Aramco's refinery, to most of those hiring only ten people provided the first glimpse at the structure of large scale industry.

Because the large Aramco refinery was included, the Eastern Province had nearly 70 percent of the capital but employed only 34 percent of the workforce. The Western area employed nearly 24 percent of the capital and 45 percent of the workforce. The central region employed 7 percent of the capital and 20 percent of the workers. Other areas had almost no large industry even when the category required only ten workers in a plant to qualify.

The 1970 survey found that most of the plants operated substantially below capacity. Underutilization averaged 64 percent for the plants surveyed. The reason the plants failed to operate near full capacity was not given, but presumably included shortages of skilled manpower and materials, competition from imports, and limited domestic markets. The underutilization of capacity continued into the mid-1970s for some of the important industries.

The 1971 industrial survey shows a similar pattern for that year: (12)

1. About 66 percent of all firms were engaged in commerce. Manufacturing was a poor second at 16 percent, followed by services at 4 percent.

2. While the largest number of manufacturing establishments were located in the Western Province, 32 percent of all persons employed in these firms were unpaid family workers. This percentage rose to 45 percent for firms engaged in commerce. Also for that year, one person establishments accounted for about 60 percent of all establishments, and those with less than 10 workers represented 98 percent of all establishments in the kingdom. In contrast, firms in the oil sector, while few

in number, employed more than 50 persons each.

In 1972 a survey showed a similar pattern in that:

1. About 65 percent of all firms operated in food and textile activities. These firms were found to be small family undertakings.

2. Less than 0.5 percent of these firms employed more than 50 persons.

3. The relative contribution to the GDP of large and small firms was in reverse to their sizes.

The picture of Saudi manufacturing in the early 1970s is, therefore, one dominated by small firms. In 1971 nearly 95 percent employed fewer than five persons. These firms were essentially handicraft shops and accounted for nearly half of the employment in all of the manufacturing sector. Presumably most of these firms were smiths (working with gold, silver, brass, and iron), carpenters (making carved screens, panels, and doors), and handloom weavers (weaving products like the famous wool cloaks from Hufuf). Food processing was the final area of activity.

A second group of small scale manufacturing establishments, numbering 746 employed between five and nine workers. These shops probably had little more than simple equipment. The range of activities probably included book binding and perhaps some printing, the manufacturing of bricks and other building materials, repairing by small machine shops, food processing, and wool and metal forming.

More than one-half of the small scale industry was located in the Hejaz and northern Asir. A little over one-quarter of the manufacturing was in the central area, reflecting the growing urbanization around Riyadh and some of the oases of the Najd. The Eastern Province contained less than one-fifth of the establishments, and the northern and southern areas the remainder.

In general by 1971, the major difficulties for large scale industry were as they had been a decade earlier:

1. insufficient clarity in industrial policy and inadequacy concerning commercial and contractual relations;

2. slowness in government departments and the proliferation of agencies dealing with industrial establishments;

3. costliness of labor and the need to rely on expatriates whose visas and residence permits took an inordinate

ly long time to obtain;

4. costliness of imported raw materials and irregularity in their flow;

5. the large volume of capital investment required generally, owing to the inability of most establishments to enjoy large scale protection which was in turn at least partially due to the preference for imported goods in the market, and finally

6. the inadequacy of certain public facilities like electricity, roads and means of communication, and data provided by the competent government agencies.

Recent Initiatives

Since the early 1970s, the basic structure of industry has changed dramatically and is beginning to take on a more modern form. This process has been brought about by three major factors:

1. The use of formal economic planning for the development of both the public and private sectors, beginning with the First Five Year Plan (1970-75).

2. The decrees, regulations and incentives which the government uses to solicit the participation of the Saudi and foreign private entrepreneurs.

3. The tremendous economic power which the government derives from its increased oil revenues.

Before the First Plan was crystallized, certain priorities were assigned to the role of industry in the country's development. These involved:

1. The conscious decision that, wherever possible, private investment should be encouraged and furthermore supported by the supply of certain essential services by the government.

2. An impetus to move government sector investment into a number of basic heavy industries.

3. The creation of industrial estates to facilitate industrialization and at the same try to minimize heavy concentrations of industry and population, thus avoiding an overload on existing urban locations.

The sharp increase in oil revenues in the mid-1970s had removed the financial constraint on industrial development. Money was available to finance any project thought desirable. The Second Development Plan (1975-80) was prepared in this

lent of nearly U.S. \$15 billion over the plan period (excluding projects in electricity and transportation). It was anticipated that private investment would also add sufficiently to industrial investment.

Incentives for the Private Sector

Because of some hesitancy on the part of Saudi entrepreneurs to invest in manufacturing, the government has increasingly been involved in the economy through the enactment of a series of incentives designed to increase the profitability of this type of investment and/or reduce the uncertainty of the investment. (13)

Tariffs Exchange Rates, Excise Taxes: The government is committed to the preservation of free trade, to a fixed exchange rate, and to the absence of restrictions on foreign exchange or on the remittance of net earnings. In August 1974 tariffs were reduced significantly as a measure to control the cost of living. Foods, medicine, raw materials, and machinery are tariff free, but again, the tariff could reach 20 percent if it is to protect domestic industry.

Subsidies in Cash: In 1974 the government abolished taxes on fuels leading to a substantial cost reduction for business users. In addition to what might be the lowest fuel cost in the world, the government has reduced the electricity rate to SR .05 per kilowatt hour for industrial uses. The electric generating firms are, however, privately owned and in order to guarantee a fair rate of return to them, a subsidy program was initiated in 1974. The problem arose largely because the power stations are small and costs are high. Costs could be reduced by enlarging capacity, but demand is not sufficient. Guaranteeing a fair return to enlarge power stations in this case led to the company's claims for some sort of subsidy.

In recognition of the effect of the rising cost of construction on the willingness and ability of private investors to undertake new projects or expand existing ones, the government took it upon itself to subsidize building materials. Cement is the only subsidized material, but producers in several other areas have requested subsidies.

To enlarge expansion of farm output and improvement of farm productivity, the government administers one of the country's oldest subsidy programs. Subsidies cover a substantial

The government discriminates in favor of Saudi agricultural producers of government supplies by accepting their bids even though their prices may be up to 10 percent higher than the similar imported supplies.

In 1973, the government began subsidizing the importation of basic food items such as wheat, flour, sugar, and rice in an effort to reduce the cost of living. Appropriations in the first year of the program totalled SR 300 million. During 1974-75, more commodities such as milk, milk products, and vegetables were added to the list of subsidized food items. The budget appropriations have increased accordingly to SR 800 million. In addition to cement and fertilizers, these subsidized products provide the only examples of price control in Saudi Arabia.

Financial Assistance

The Saudi Industrial Development Fund was established in 1974 to finance new industrial ventures on concessionary terms. Medium to long term loans (average seven years) are granted to companies. The Fund's program to date has taken on a specific orientation:

1. Loans are made to companies able to demonstrate a likelihood of their products being financially and economically viable and fitting the government's development criteria.
2. Capital and energy intensive projects are encouraged; labor intensive projects are looked on with less favor.
3. Funds covering up to 50 percent of a project's capital requirements are lent at a cost of around 2 percent a year.
4. The government is reluctant to impose new tariffs although it does grant in special cases protection up to 20 percent.
5. Incentives and subsidies in the form of low interest rates, low utility rates, low tax rates are the preferred methods of channeling funds into the industrial sector.

During the period 1974/75 to 1978/79, the Fund approved 506 industrial loans involving a total amount of SR 5,416 million. The loans disbursed during 1978/79 amounted to SR 1,117 million, thus raising the total loan disbursements to SR 3,414 million.

To support the activities of SIDF, the Industrial Studies Development Center (ISDC) has undertaken a number of feasibility studies to identify projects likely to be attractive to

the private sector. (14)

The criteria used to determine likely candidates for investment are based on ISDC's perception of the inclinations of Saudi entrepreneurs. ISDC's view of investor preferences is that:

1. Demonstration of existing demand plays a fundamental role in assuring investors of the absence of risk. Because Saudi businessmen are conservative by nature and tradition, it is logical that they would prefer import substitution type industries.
2. In responding to the government's incentives, projects that display externalities or linkages on both the supply and demand side would be favored by the private sector.
3. Saudi entrepreneurs are profit maximizers. It is thus assumed by ISDC that throughout the massive program of government assistance and expenditure, private investors will find that an expected yield of at least 20 percent rate of return on investment is sufficient inducement. This rate is assumed to be fair in comparison with returns on conventional alternative uses such as commerce.

A second important financial development has been the establishment of the Public Investment Fund (PIF). This organization was established in 1971 to meet the credit requirements of public corporations engaged in commercial or industrial activities, especially Petromin and SABIC. Cumulative loan disbursements by the Fund between 1972/73 and 1978/79 reached SR 10, 812 million while domestic and foreign investments stood at SR 4,750 million and SR 973 million, respectively.

Industrial Estates

One of the most helpful facilities provided by government to the private sector to encourage industrial expansion has been the establishment of industrial estates which besides allocating land plots at nominal rates are also equipped with utilities, workshops, transportation facilities, communications channels, banks and other necessities. The Riyadh, Jeddah and Dammam estates have witnessed considerable expansion. The area of the Riyadh estate has been expanded from 451,028 square meters to 21,000,000 square meters; that of Jeddah estate from 1,044,008 square meters to 9,100,000 square meters; and that of the Dammam estate from 994,653 square meters to 24,000,000 square meters. Work is in progress for setting up industry in Mecca, Qasim, Hafuf, Medinah, and Abha.

Subsidies in Kind

The ambitious nature of the government programs to develop the country's social and economic infrastructure are evident from the size of government expenditure. These programs lower business costs significantly.

The government has established industrial parks in major industrial and trading zones of the country. These estates are planned to provide all basic infrastructures essential to business firms; i.e., water, electricity, telephone, banking, post office, police, and fire protection services. Lots in these industrial parks are available to prospective users at a nominal rent.

Several institutions provide research, consulting, and training services to the business sector either free or at a nominal cost. ISDC vocational training institutions and agricultural extension services are part of this effort.

Licensing

Licensing is obligatory for new or joint industrial projects. Saudi firms who expect to seek government protection and assistance must also be licensed. Government licensing provide assurances prior to the undertaking of feasibility studies, that the projects will contribute to plan fulfillment.

Taxes

Saudi business firms pay a tax called Zakat at a rate of 2.5 percent on their wealth.⁽¹⁵⁾ Except for that, there are no property, income, or sales taxes on Saudi firms. Because most small businessmen do not keep accurate records and the consequent difficulty of auditing by the tax authorities, most of these firms end up paying little or no tax. The light burden of this tax and the absence of other taxes makes business an attractive activity which seems to be in line with Moslem tradition.

Non-oil foreign businesses, however, pay income tax at a rate of 25-45 percent on net income. Oil companies are taxed at a higher rate of 55 percent on net operating income. Joint ventures, with at least a 25 percent Saudi share, are granted a tax holiday for five years commencing from the production date. Qualifying joint ventures, according to the foreign investment law, enjoy all "other" advantages granted to Saudi firms.

It is apparent that taxes payable by the Saudis are an inef-

fective instrument for changing the pattern of resource allocation. It is perhaps for that reason that the government relies more heavily on negative taxes rather than subsidies in its effort to increase the non-oil GDP. As for foreign business firms, the tax breaks which they are entitled to are highly conducive for those firms with Saudi participation. Currently, there is an effort under way to reform the rules for the taxation of foreign companies to accelerate foreign participation in development projects.

Other Incentives

Aside from government policies Aramco has perceived the need for support industries.⁽¹⁶⁾ That company has identified opportunities and assisted prospective entrepreneurs in establishing enterprises in construction, mechanical and maintenance contracting, transport, offshore servicing, catering, and many other fields related primarily to the company's own needs.⁽¹⁷⁾

After 1973 the enormous investment in government revenues rapidly disseminated to the populace encouraged a boom in construction and consumer goods, and thus created a sufficiently substantial market to interest local merchants in establishing import substitution industries.

Industrial Growth

Encouraged by the government's policy of providing services, subsidized plots in industrial estates, cheap power and inexpensive finance, and benefitting by the appalling delays in landing goods in 1976-77 due to port congestion, private Saudi firms responded with an unprecedented wave of activity. In the 1974-77 period alone, over 600 new industrial plants were initiated and in the implementation stage (Table 1).

As a result of this growth, Saudi Arabia is now virtually self-sufficient in the principal building materials: production of cement, clay concrete and sand lime bricks, tiles, aggregate, precast concrete and prefabrication systems, doors, windows, and a number of other items. The same applies to screws, steel, scaffolding and reinforcing mesh, fencing, insulation materials, air conditioning and desert coolers. Because of their high ratio of volume and weight to value, many of these items were obvious choices for local production. More recently, emphasis has been placed on consumer goods. Foodstuffs (represented

meat processing facilities, household goods (plastic bags, containers, detergents, insecticides, and other chemicals, furniture and furnishings, household appliances (such as refrigerators), all contribute to lessen dependence on the importation of such items of consumption.

Conclusions

The future, while very bright for the private sector, will not take care of itself, however. Certain difficulties exist and numerous obstacles to change exist. The most serious difficulties center around the fact that:

1. Reliable statistics on current output, investment, employment, and industrial capacity are not available. While there have been several censuses of manufactures, these censuses are out of date and the new ones kept confidential.

2. Government machinery operates weakly with an occasionally competent individuals presiding over a cumbersome and inexperienced administration apparatus.

3. Private businessmen have not yet learned to operate effectively developing schemes as government laws and incentives change rapidly.

4. Few government people are familiar with the mechanics and problems of industry.

5. Nearly all planning activity is centralized in Riyadh, with a consequent limiting effect on the planners' perspectives. Over-centralization is not a fault of the planners' approach to their task; it simply reflects the historical policy of not allowing local government and private interest groups to become too strong.

6. And finally, the limited size of the market makes it difficult to foresee a long vigorous growth in import substitution projects, since many of the available sectors, particularly in building materials, are now in a domestic supply-demand equilibrium. In foodstuffs, plastics, chemicals, and metal working opportunities still undoubtedly exist.

Increasingly, however attention must be focused on export possibilities using feedstock from the large petrochemical plants planned for Yanbo and Jubail. The extent to which downstream export factories will be erected depends upon the government's approach. By maintaining a cheap capital and energy supply, and by subsidizing the necessary raw materials, many possibili-

FOOTNOTES

- (1) Ali M. Jaidah, "Downstream Operations and the Development of OPEC Member Countries," *Journal of Energy and Development* (Spring, 1979), p. 305.
- (2) Points clearly articulated by Louis Terner. See his "Industrial Development Strategies in the Arab Gulf States," in May Ziwar-Daftari, ed., *Issues in Development: The Arab Gulf States* (London: MD Research Services Limited, 1980), p. 210.
- (3) Industrial Studies and Development Centre, *A Guide to Industrial Investment in Saudi Arabia*, Fifth Edition (Riyadh: ISDC, 1977), p. 35.
- (4) Ibid.
- (5) Cf. "Saudi Arabia Moves to Diversify Economy: Industrial Development Has Priority," *Arab Economist* (August, 1977), pp. 24-29.
- (6) *A Guide to Industrial Investment in Saudi Arabia*, op. cit., pp. 35-36.
- (7) Ibid.
- (8) Ramon Knaverhase, "Saudi Arabia's Economy at the Beginning of the 1970s," *The Middle East Journal* (Spring, 1974), pp. 126-127.
- (9) Fariborz Ghadar, *The Evolution of OPEC Strategy* (Lexington, Massachusetts: Lexington Books, 1977), p. 108.
- (10) Ramon Knaverhase, *The Saudi Arabian Economy* (New York: Praeger Publishers, 1975), p. 144.
- (11) The results of the early census may be found in Central Department of Statistics, *Statistical Year Book*, various issues.
- (12) Ibid.
- (13) The following list of incentives is based largely on information contained in: Saudi Arabian Monetary Agency, *Annual Report*, various issues; The Industrial Studies and Development Center, op. cit.; and Industrial Studies and Development Center, *Non-Oil Manufacturing in the Private Sector: Present Conditions and Projections for the Second Plan* (Riyadh: ISDC, 1974).
- (14) A.M. Sharshar, "Oil, Religion and Merchantilism: A Study of Saudi Arabia's Economic System," *Studies in Comparative International Development* (Fall, 1977), p. 54.
- (15) Details are spelled out in: Zakat and Income Tax Department, *Regulations for Income Tax, Road Tax, and Zakat* (Riyadh, Ministry of Finance and National Economy, 1978).
- (16) Joseph Malone, "Building a Constituency: Non-Petroleum Activities and Programs of the Arabian American Oil Company," paper presented at Center for Arab Gulf Studies, University of Exeter, State, *Economy and Power in Saudi Arabia* (Symposium, July 4-7, 1980), pp. 18-19.
- (17) Through Aramco's Local Industrial Development Department, Cf. Emid Hill, "Saudi Labor and Industrialization Policy in Saudi Arabia," paper presented at Center for Arab Gulf States, University of Exeter, State, *Economy and Power in Saudi Arabia* (Symposium, July 4-7, 1980).